

CLAIMS

1. An enclosure comprising:

a chassis having a floor and opposing sidewalls;

5 discrete first and second midplanes, each having an opening formed therein, the first and the second midplanes operable to be secured in an interior of the chassis between the sidewalls and oriented in orthogonal relationship to the sidewalls, the first and second midplanes each configured to mate to at least one air displacement unit on a back surface of the associated midplane and to mate to at least one device sled on a front surface of the associated midplane, each opening being aligned with at least one of the air displacement
10 units.

2. The enclosure of claim 1, further comprising a divider wall disposed on the floor of the chassis and oriented parallel with the sidewalls of the chassis and perpendicular to the floor of the chassis.

15 3. The enclosure of claim 1, wherein each of the midplanes is configured to mate to at least one controller on the front surface of the midplane, the chassis comprising:

a shelf disposed on at least one of the sidewalls;

a controller mounted on the shelf and connected to the midplane.

20 4. The enclosure of claim 1, further comprising:

tabs extending from the front surface of each of the midplanes;

slots formed in the chassis, the tabs operable to be inserted into the slots to secure the midplanes within the chassis.

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5. The enclosure of claim 1, wherein each device sled comprises multiple discrete data storage mediums.

6. The enclosure of claim 1, wherein each air displacement unit is oriented parallel with the sidewalls of the chassis.

7. An enclosure comprising:

a chassis having a floor, first and second sidewalls disposed on opposite sides of the floor, and a divider wall disposed on the floor between the first and second sidewalls;

10 first and second midplane sleds, each midplane sled having a front wall and a hole formed through the front wall the front wall having first and second surfaces, the first surface of the front wall being configured to connect to at least one device sled and the second surface of the front wall being configured to connect at least one power supply unit;

15 the first midplane sled being removably disposed between the first sidewall and the divider wall and the second midplane sled being removably disposed between the second sidewall and the divider wall;

first device sleds removably disposed between the first sidewall and the divider wall and adjacent the first midplane sled;

20 second device sleds removably disposed between the second sidewall and the divider wall and adjacent the second midplane sled;

8. The enclosure of claim 7, wherein the divider wall is oriented in parallel relationship with the first and second sidewalls.

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9. The enclosure of claim 7, wherein the divider wall is oriented orthogonal in orthogonal relationship to the floor of the chassis.

10. The enclosure of claim 7, further comprising a shelf disposed on the first sidewall for permitting mounting of a controller thereon.

11. The enclosure of claim 7, wherein each of the device sleds includes multiple data storage devices.

10 12. A midplane sled comprising:

a floor;

opposing sidewalls disposed on the floor and oriented in orthogonal relationship with the floor;

15 a front wall disposed on the floor and oriented in orthogonal relationship with the floor, the front wall being oriented in orthogonal relationship with each of the sidewalls, the front wall having first and second sides;

an opening formed in the front wall;

tabs extending from the front wall adjacent the first side of the front wall for mating with corresponding slots in a chassis;

20 a first connector attached to the first side of the front wall for mating with a corresponding connector of a device sled;

a second connector attached to the second side of the front wall for mating with a corresponding connector of an air displacement unit.

13. The midplane sled of claim 12, comprising a third connector attached to the first side of the front wall for mating with a controller.

14. The midplane sled of claim 12, further comprising a guide disposed on the floor, the guide being oriented in parallel relationship to the opposing sidewalls.

15. A chassis comprising:

a floor;

first and second sidewalls adjacent the floor;

10 a divider wall on the floor and positioned between the first and second sidewalls, the divider wall oriented in parallel relationship with the sidewalls;

guides disposed on the floor on opposite sides of the divider wall and oriented in parallel relationship with the sidewalls;

a shelf mounted on the first sidewall;

15 slots positioned adjacent the first and second walls and on opposing sides of the divider wall.

16. The chassis of claim 15, further comprising slots positioned adjacent the floor.

20 17. The chassis of claim 15, further comprising first and second midplane sleds disposed on the floor and positioned on opposite sides of the divider wall.

18. The chassis of claim 15, further comprising first and second midplane sleds disposed on the floor and positioned on opposite sides of the divider wall, wherein each

of the first and second midplane sleds further comprises tabs extending therefrom for mating with the slots.

19. The chassis of claim 15, further comprising device sleds disposed between
5 adjacent guides.

20. The chassis of claim 15, further comprising:

a first midplane sled disposed on the floor and positioned between the first
sidewall and the divider wall;

10 first device sleds disposed on the floor and positioned between the first sidewall
and the divider wall, the first device sleds being connected to the first midplane sled;

a second midplane sled disposed on the floor and positioned between the second
sidewall and the divider wall;

15 second device sleds disposed on the floor and positioned between the second
sidewall and the divider wall, the second device sleds being connected to the second
midplane sled.

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